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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/176,639

Filing Date: October 20, 1998

Appellant(s): SCHEDIWY ET AL.

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S. Jared Pitts  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 31, 2010 appealing from the Office action

mailed January 22, 2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 24 and 52-96 are pending, rejected and appealed in this application.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN"

REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 24, 52-96 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 24 teaches the limitation of “said touch layer having a conductivity selected to create an image of a conductive object that is larger than an area of contact of said conductive object”...”wherein the conductivity of said touch layer is configured to limit the size of said [image] to approximately four time the area of contact of said conductive object”.

Claim 52 teaches the limitation of “wherein the conductive touch layer has a conductivity configured to create an image of said conductive object that is larger than an area of contact of said conductive object”.

Claim 63 teaches the limitation of “wherein the conductive touch layer comprises conductive carbon disposed in epoxy and has a conductivity selected to create an image of said conductive object that is at least four times larger than an area of contact of said conductive object”.

Claim 68 teaches the limitation of “wherein the conductive touch layer has a conductivity configured to create an image of said conductive object that is larger than an area of contact of said conductive object with said conductive touch layer”.

Claim 88 teaches the limitation of “wherein said conductive touch layer has a conductivity configured to create an image of said conductive object that is larger than an area of contact of said conductive object”.

With respect to claims 24, 52-96, the specification does not adequately disclose how the “conductivity is configured to create an image of said conductive object that is larger than an area of contact of said conductive object”. The specification, on page 10, lines 4-7, teaches “For best operation, the conductivity of the surface layer should be chosen such that the image of the stylus is about the same size as the image generated by a finger on a normal capacitive sensor.” However, the specification does not teach how the conductivity is chosen or selected as claimed in the independent claim. The specification on page 9, line 14-page 10, line 7, simply state that a conductivity that is too large or too small is flawed, however a moderate conductivity is

appropriate. Therefore, the specification fails to accurately describe or define how a moderate conductivity is determined.

3. Claims 24, 52-96 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 24 teaches the limitation of “said touch layer having a conductivity selected to create an image of a conductive object that is larger than an area of contact of said conductive object”...”wherein the conductivity of said touch layer is configured to limit the size of said [image] to approximately four time the area of contact of said conductive object”.

Claim 52 teaches the limitation of “wherein the conductive touch layer has a conductivity configured to create an image of said conductive object that is larger than an area of contact of said conductive object”.

Claim 63 teaches the limitation of “wherein the conductive touch layer comprises conductive carbon disposed in epoxy and has a conductivity selected to create an image of said conductive object that is at least four times larger than an area of contact of said conductive object”.

Claim 68 teaches the limitation of “wherein the conductive touch layer has a conductivity configured to create an image of said conductive object that is larger than an area of contact of said conductive object with said conductive touch layer”.

Claim 88 teaches the limitation of “wherein said conductive touch layer has a conductivity configured to create an image of said conductive object that is larger than an area of contact of said conductive object”.

The specification does not adequately disclose how the “conductivity is configured to create an image of said conductive object that is larger than an area of contact of said conductive object”. The specification on page 10, lines 4-7, teaches “For best operation, the conductivity of the surface layer should be chosen such that the image of the stylus is about the same size as the image generated by a finger on a normal capacitive sensor.” However, the specification does not teach how the conductivity is chosen or selected as claimed in the independent claims without undue experimentation. The specification on page 9, lines 14-page 10, line 7, simply state that a conductivity that is too large or too small is flawed, however a moderate conductivity is appropriate. Further, the specification does not define how moderate conductivity is determined.

Therefore as stated in the MPEP, the specification does not meet the enablement requirement as it does not enable a person of ordinary skill in the art to make and use the claimed invention without resorting to undue experimentation. See *In re Brown*, 477 F.2d 946, 177 USPQ 691 (CCPA 1973); *In re Ghiron*, 442 F.2d 985, 169 USPQ 723 (CCPA 1971). See MPEP 2161.01. Applicant is further directed to MPEP 2164.01 and 2164.06 (c) for further information in regards to undue experimentation.

## **(10) Response to Argument**

### **35 USC 112, first paragraph rejection, written description**

**Appellants argue where the specification meets the written description requirement as the specification teaches the following:**

**a conductive touch layer that has a moderate conductivity that spreads out the ground image of the tip of the stylus on page 8, lines 25-31, and a suitable material for this purpose is a conductive carbon powder in a plastic carrier material such as epoxy on page 9, lines 1-13 and by controlling conductivity of layer 501, the image of the stylus tip can be adjusted to provide a sufficient signal on an appropriate number of electrodes on page 9, lines 14-17 and in Fig. 6. Appellant argues where the specification on page 9, lines 19-33 teaches that if the conductivity is too large, the image will be very large; and if the conductivity is too small, the image will not be much larger than the tip of the stylus. Appellant argues where the specification teaches that the conductivity of the surface can be chosen for best operation such that the image of the stylus is about the same size as a finger would be on a capacitive sensor on page 10, lines 3-6 and page 12, lines 4-12. Appellants argue where with these passages of the specification, there is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed.**

While the specification discloses these statements, examiner, respectfully, disagrees that these statements in the specification alone are sufficient to satisfy the written description requirement.

The specification does not adequately disclose how the "conductivity is configured to create an image of said conductive object that is larger than an area of contact of said conductive object". The specification on page 10, lines 4-7 teaches "For best operation, the conductivity of the surface layer should be chosen such that the image of the stylus is about the same size as the

image generated by a finger on a normal capacitive sensor". The specification is silent with regards to how the conductivity is achieved, and further only states on page 9, line 14-page 10, line 7, that a conductivity is too large or too small is flawed, and where a "moderate" conductivity is appropriate.

Appellants argue "that someone with ordinary skill in capacitive sensor design would have a professional level of training in electrical engineering and physics, and would thus have a strong understanding of underlying material properties, including the conductivity of material such as carbon impregnated epoxy", and that taken together with the specification describing a conductive touch layer that creates an image of a conductive object that is larger than an area of contact provides adequate written description. Examiner, respectfully, disagrees. As recited above, appellant describes in the specification that a conductivity too large or too small is flawed. While the specification discloses a carbon impregnated epoxy as a suitable material, however, it is not stated that the carbon impregnated epoxy provides a moderate conductivity. Page 9, lines 1-13 of the specification states "Layer 501 is made from a conductive material durable enough to be exposed as the surface of the touch pad with no protective coating. A suitable material for this purpose is conductive carbon powder in a plastic carrier material such as epoxy". Further, the specification does not describe the how much carbon powder is required for a moderate conductivity.

The specification makes mere conclusionary statements with regards to the appropriate "moderate" conductivity as opposed to describing how the proper conductivity is achieved in the touch layer. Therefore, one of ordinary skill in the art would not conclude a clear and concise

description teaching the conductivity of the touch panel. Therefore, the specification does not satisfy the written description requirement.

**35 USC 112, First paragraph, enablement requirement**

**Appellants argue where the claims meet the enablement requirements as the specification teaches the following:**

**a conductive touch layer that has a moderate conductivity that spreads out the ground image of the tip of the stylus on page 8, lines 25-31, and a suitable material for this purpose is a conductive carbon powder in a plastic carrier material such as epoxy on page 9, lines 1-13 and the moderate conductivity of the material causes the effect to dissipate with distance from the point of contact with the stylus (page 9, lines 8-13) and by controlling conductivity of layer 501, the image of the stylus tip can be adjusted to provide a sufficient signal on an appropriate number of electrodes on page 9, lines 14-17 and in Fig. 6. Appellant argues where the specification on page 9, lines 19-33 teaches that if the conductivity is too large, the image will be very large; and if the conductivity is too small, the image will not be much larger than the tip of the stylus.**

Examiner does not disagree that these specific statements are disclosed in the specification.

**Appellants further argue where the term "moderate" clearly defines an intermediate amount of conductivity, and where moderate is defined by Merriam-Webster's Collegiate**

**Dictionary, 11th Edition, a being "tending toward the mean or average amount or dimension". Appellants therefore, conclude that a material having moderate conductivity would not have the full conductivity found in a pure metal conductor. Further, Appellants argue where the specification describes a suitable material for use in a touch layer (giving the example of carbon powder in epoxy), and describes a suitable conductivity (a moderate conductivity) and Therefore, the term moderate conductivity would not require undue experimentation.**

Examiner, respectfully, disagrees. As stated in the MPEP 2161.01, the specification does not meet the enablement requirement as it does not enable a person of ordinary skill in the art to make and use the claimed invention without resorting to undue experimentation. See In re Brown, 477 F.2d 946, 177 USPQ 691 (CCPA 1973); In re Ghiron, 442 F.2d 985, 169 USPQ 723 (CCPA 1971).

Appellant's specification, fails to provide reasonable and adequate direction to determine and achieve moderate conductivity. The Appellant's specification does not disclose how the conductivity is chosen. The specification on page 9, lines 14-page 10, line 7, only indicate that a conductivity that is too large or one that is too small is flawed, and where a moderate conductivity is appropriate. Further, the specification indicates a moderate conductivity can be one where the image created can be four times larger than the tip of the conductive object. No where is it mentioned in the specification the size of the tip of the conductive object. The specification requires trial and error/undue experimentation to achieve a touch layer that provides

moderate conductivity in order to create an image larger (or four times larger) than the tip of the conductive object.

With respect to the Appellant's argument that that the description of the carbon powder in a plastic carrier such as epoxy would satisfy the enablement requirement. Examiner, respectfully, disagrees. While the specification discloses a carbon impregnated epoxy as a suitable material, however, it is not stated that the carbon impregnated epoxy provides a moderate conductivity. The specification, page 9, lines 1-13, states "Layer 501 is made from a conductive material durable enough to be exposed as the surface of the touch pad with no protective coating. A suitable material for this purpose is conductive carbon powder in a plastic carrier material such as epoxy". Further, the specification does not describe the how much carbon powder is required for a moderate conductivity. Therefore, one of ordinary skill in order to determine a moderately conductive carbon powder in an epoxy would require undue experimentation.

Thus, the enablement requirement is not satisfied as the invention would require undue experimentation to achieve a conductivity to create an image larger than the tip of the conductive object.

Therefore, in summary, as shown by the rejection and response above, the specification does not adequately satisfy the written description and enablement requirements.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Srilakshmi K Kumar/

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